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Alpha leukotomy

[illegible]

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□□□□□□ **Alpha** □□□□□

Deepmind [2]

AlphaGo Master 五连胜 AlphaGo Master AlphaGo Master 五连胜  
五连胜 AlphaGo Zero 三 AlphaGo Master 三 AlphaGo Master  
五连胜

AlphaGo Zero 3000 AlphaGo Master 3000 AlphaGo Zero 3000000000[3] 3000000000  
AlphaGo Master 30000000000 16 3000000000 AlphaGo Zero 30000000000 18 3000000000  
AlphaGo Zero 3000 14 16 3000 45 3000000000000000

1. Nature Magazine AlphaGo Deepmind AlphaGo Zero AlphaGo Master

2) AlphaGo Zero local trap  
AlphaGo Zero Alpha

[AlphaGo Zero](#) [AlphaGo Master](#) [AlphaGo Master](#) [AlphaGo Master](#) [4] [Nature Magazine](#) [AlphaGo Zero paper](#) [AlphaGo Master](#) [deep-learning](#)

AlphaGo Zero AlphaGo Master AlphaGo Master

AlphaGo Zero [5] game

Superhuman ○○○○○○○○○○○○○○○○○○○○Clock ○○○○○IBM S/360 ○○○○○○○○○○○○○○○○○  
○○○○○○○○○○○○ AlphaGo Zero □ superhuman□IBM S/360 □□ superhuman○○○○○○  
AlphaGo Zero ○○○○○○○ Nature Magazine ○○○○ AlphaGo Zero paper ○○○○○  
superhuman ○○○

superhuman Technological Singularity  
Demis Hassabis AlphaGo

**Alpha** Deepmind team  
Alpha Alpha Alpha

AlphaGo Zero superhuman [7] superhuman

superhuman 深度學習強化學習 superhuman 問題

AlphaGo Zero AlphaGo Master AlphaGo Master superhuman AlphaGo Master 60 3 AlphaGo Master superhuman AlphaGo Master AlphaGo Zero superhuman superhuman [8]

Alpha Alpha

Alpha Turing Machine deep-learning Alpha Deepmind AlphaGo Zero AlphaGo Master AlphaGo Zero AlphaGo Zero

Deep-learning credit reinforcement credit reinforcement local trap

leukotomy reinforcement peer review Socratic method peer review Socratic method peer review

ideas are cheap idea cheap reinforcement [9]

AlphaGo reinforcement

[10]

[11]

Turing Machine local trap Universal approximation

Socratic method Superhuman

[illegible]

Demis Hassabis    AlphaGo    [12]     
Geoffrey Hinton   

[illegible]

The Sceptical of Chemist

[illegible][illegible][illegible]

[16]

## Leukotomy □□□□□□□□□□□□

2020 leukotomy 2020 Leukotomy 2020 BRAIN Initiative 2020 AlphaGo 2020

3 personality & intelligence 1956 Walter Freeman personality & intelligence

BRAIN Initiative project NIH BRAIN 2025 Report “there is general agreement that types can be defined provisionally by invariant and generally intrinsic properties” invariant agreement insights “envision an integrated, systematic census of neuronal and glial cell types” dynamic brain mapping “Link brain activity to behavior” “Produce conceptual foundations for understanding the biological basis of mental processes” mental processes & behavior

BRAIN Initiative project personality & intelligence brain mapping personality & intelligence hidden assumptions

personality & intelligence

BRAIN Initiative project brain mapping mental diseases personality & intelligence personality & intelligence leukotomy

leukotomy Alpha

personality & intelligence mental diseases

BRAIN Initiative brain mapping human level intelligence personalities intelligence mental diseases BRAIN Initiative neurosciences AlphaGo generic human intelligence Alpha neurosciences [17]

AlphaGo Master AlphaGo Zero AlphaGo Zero AlphaGo AlphaGo Master Alpha

Alpha

Technological Singularity BRAIN Initiative project Technological Singularity baseless

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[6] ~~~~~

Deepmind Alpha Nature Magazine Alpha

[7] <http://www.alphago-games.com/> Full Strength of Alphago Zero, i.e. Final Form 40 Blocks 20 Blocks Not Full Strength of Alphago Zero Alphago Zero superhuman

[8]

[9] 2012 "Show, don't tell" show Socratic method tell and discuss

Ideas are cheap

[10] "Go gaming is strictly defined within a very small space. Industrial automations are typically designed in well controlled environments, but not strictly defined. Car driving is regulated, but the environment is not well controlled"

[11]

Alpha

[12] AlphaGo Master AlphaGo AlphaGo Alpha

[13] Dialogue Concerning the Two Chief Word Systems Socratic Method

AlphaGo

[17]  $\alpha$  Alpha